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If you can't beat them; joint problem solving in Dutch fisheries management

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Abstract

Declining fish stocks have led governments over the years to deploy traditional top-down measures in fisheries management. This top-down model is generally held responsible for the failure of fisheries management, attributed to the state's ignorance of environmental effects of decisions and the lack of participation of the people affected. A way forward is perceived to be the common formulation of the problem and the design of its most adequate solution strategies in a policy-making process in which state, market and civil society play a significant role. In search for alternatives, Dutch government is increasingly deploying the instrument of covenants in fisheries management. We will use the Dutch case to analyse the role and function of covenants in fisheries management and seek to translate the Dutch experience to the wider European context of the EU Common Fisheries Policy.

Introduction

Declining fish stocks have led governments over the years to deploy traditional top-down measures which have led to an economic inefficient and overcapitalised fishery, a remaining pressure on the resource and a fisheries management system in crisis (van Hoof, et al. 2007; Raakjær 2008). The lack of legitimacy is often perceived in EU fisheries management as the factor leading to governments failing to effectively govern fisheries (Commission of the European Communities 2001; Hawkins 2005; Sissenwine and Symes 2007; Commission of the European Communities 2008).

In the wider field of environmental politics we can notice a gradual shift in political participation triggered by criticism on the state regarding both its ignorance of environmental effects of decisions and the lack of participation of the people affected (van Tatenhove and Leroy 2003; Mol 2007). A decreasing centrality of the state as a political actor and an increasing interweaving of state, market and civil society, in which the common formulation of the problem and the design of its most adequate solution strategies are part of the policy-making process, is perceived as the way forward (Arts and van Tatenhove 2004; Arts, et al. 2006; van Tatenhove 2008; van Tatenhove and van Leeuwen 2009).

The shift to more open forms of participative governance and the broadening of representation has in the last decade also become fashionable in the realm of fisheries management. Partly because of dissatisfaction with the performance of fisheries management systems across the world, partly because of the increasing interest in the notion of 'governance' as a substitute for 'government' in a variety of policy sectors,

and partly because of the growing popularity of the concept of stakeholder participation in all areas of governance and decision-making (Gray 2005). In fisheries governance this has resulted in a variety of new governance models and concepts that focus on interaction and participation, such as adaptive co-management (Armitage, et al. 2009) and interactive governance (Kooiman, et al. 2005). Interactive and participatory governance models depict governing systems as complex, heterogeneous networks, as political coalitions of more or less numerous and powerful stakeholder groups, who are partly internal and partly external to the system. Goals are not given *ex ante* and once and for all, but are relative to, and shift with, particular stakeholder compositions and interactions among stakeholder groups (Jentoft 2007). These models work on the assumption that each group has interests to defend and contributions to make and the negotiation of conflict and the building of compromise or consensus are central. Consequently, making policy is not so much about the exercise of authority as about political brokerage (Jentoft 2007).

In Europe fisheries management traditionally takes place in a neo-corporatist arena. Social-economic policies are jointly developed by government and representatives from the fisheries sector (van Hoof, et al. 2005; van Hoof 2010). This neo-corporatist foundation has provided for example in the Netherlands a stage for the development of a co-management system in the early 1990s, in which the fishing industry gained a significant role in the management of fishing quota. In addition we have witnessed over the past years the coming about of a new way of policy making in Dutch fisheries: covenants; a social contract between state, market and society on fisheries management. In this article we will use these Dutch experiences with the use of covenants in fisheries management to analyse the role and function of such covenants in fisheries management and seek to analyse their wider implication for fisheries management within the context of the EU Common Fisheries Policy (CFP). The central question we will seek to answer is whether covenants can serve as an effective alternative for top-down fisheries management and provide an alternative institutional arrangement that can live up to the desired policy objective of an economic, ecological and social sustainable fisheries.

The perspective we will take in this analysis is that from a government seeking to solve a particular fisheries management problem. This study is based on two sources of data. The first source consists of interviews conducted with governmental officials, sector representatives and representatives from the Environmental NGO (ENGO) community. The second source consist of literature on covenants and policy documents that were gathered and analysed.

In the *Theory of covenants* section we will present a theoretical frame for the analysis of covenants. In the *Covenants in Dutch fisheries management* section we will present the three fisheries covenants developed in the Netherlands: the management of engine capacity in the cutter fleet, the North Sea cutter fisheries sustainable fisheries covenant and the mussel fisheries covenant. In the *Analysing the character of Dutch fisheries covenants* section we will analyse the role of these covenants in Dutch fisheries management and finally in the *Discussion* section we will discuss these findings and draw some conclusions.

Theory of covenants

In the first decades of modern environmental policy (1970–1990) environmental aims were translated into standards for products and production processes (Glasbergen

1998). After the 1990s we can witness the transition from central management by means of coercion and incentives, via interactive management and internalisation (target group policy, covenants) towards self-control (Chappin, et al. 2009). In its basic form covenants are more or less formal agreements between a governmental organisation (usually a ministry) and a representative of the private sector (usually a sector organisation) with the intent of, on a voluntary basis, achieving national environmental policy aims (Glasbergen 1998).

According to Korver and Oeij (2005) covenants are a form of soft law, such as declarations of intent, social contracts, 'gentlemen's agreements' or simply 'agreements', in which the operationalisation and execution is delegated to social partners and organisations. Covenants usually are created and implemented in a process involving government, but in which the social partners take the actual lead in delivering the goods. The social partners regulate 'how' themes and issues of common concern can be tackled. As in most soft law, covenants tend to be procedural rather than substantive (Korver and Oeij 2005).

The advantage for government to use a covenant, following Korver and Oeij (2005) is that covenants may compensate for the defects of traditional legislation, substituting for the declining power of 'command and control'. With the covenant the government enlists the cooperation of non-public parties in order to achieve its goals. For the latter (for example companies and social partners) the advantage is an enhanced predictability of the behaviour of public authorities: by binding themselves, they also bind the government. Paradoxically, though legally unenforceable, the covenant guarantees the non-governmental parties a measure of legal security they would not otherwise have. Covenants are not like regular contracts, nor are they laws: they bind, yet not in a legal sense. Rather than prescribe, they create mutual commitment. They do not stress hierarchy, but emphasize reciprocal dependence, treating dependence not as a weakness to overcome, but as a model for discovering the advantages of cooperation (Korver and Oeij 2005).

Over time the nature of covenants has changed. According to Glasbergen (1998) in a first phase, single issue voluntary agreements for specific environmental issues (such as waste management, water management and energy efficiency) or for a certain product were developed. Gradually these gave way to more complex 'second-phase' agreements, aimed at lowering the overall emissions of a sector of industry; they span a long period of time; and they call for a specific type of institutionalised co-operation between industry and government in which a consensual track (agreements on the basis of mutual trust) merges with the legal track (binding standards for products and production processes). In the third generation of negotiated agreements not only government and industry are involved but also the societal environmental concern, as represented by ENGOs, becomes part of the negotiated agreement. Hence a shift in government rule making from top-down policies towards more participatory policy development and from state centred towards constellations involving state, market and society.

According to Bressers and de Bruijn (2005) several factors can contribute to the success of a covenant, such as the motive of the target group to join the covenant, the role of the covenant in the policy cycle and the wider set of policies in which the covenant is embedded. Target groups need to have a clear motive for joining the 'voluntary' negotiations (Bressers and de Bruijn 2005). This motivation, or 'stick', can have many forms. In some cases it is the government threatening to introduce tough

regulations that drives industry to the negotiating table. In other cases it is public opinion that makes industry realise change is inevitable.

Covenants are best used for dealing with problems that need further exploring before solutions are found (Bressers and de Bruijn 2005). If all partners know the precise measures to be taken beforehand, it is questionable whether direct regulation would not be a more efficient way to proceed; as negotiation processes can carry on for years the transaction costs involved in the negotiation processes before and after concluding the covenant are substantial.

Covenants operate in a wider context of other policies and policy instruments. These other policy instruments can support the covenant, and vice versa, covenants need to be embedded in the policy system; direct regulation can deal with free-riders, subsidies can help lift technological barriers. The sole use of covenants will be less effective than the design of a complete package containing many instruments (Bressers and de Bruijn 2005).

Focusing on the first two generations of covenants, signed between government and industry, according to Smit et al.(2008) two perspectives can be taken: a business oriented perspective and a public administration, or policy oriented, perspective. The business perspective provides insights in the rationale of (actors in) supply chains and networks of firms. The public administration perspective focuses on policy networks dealing with the various actors, their interests, and the influence they try to exert on each other as well as on the policy to be formulated.

From the public administration perspective already two distinct uses of the covenant can be seen. Firstly, government can seek to deploy the instrument when top-down regulation fails. By reaching an agreement between government and sector the state has an agreement to which the industry will have to comply. In this State – Industry agreement, basically the phase one and two agreements as described by Glasbergen above, industry gains participation in setting the rules in exchange for compliance to the rules.

Secondly, government can use the covenant as a tool for conflict resolution. In case a discussion between for example industry and ENGOs has reached a stalemate, the covenant can become a pivotal instrument in the negation process. What Bressers and de Bruijn (2005) refer to as using the covenants to deal with problems that need further exploring before solutions are found. Government persuades the quarrelling stakeholders to produce a path towards a solution and seeks agreement between market (industry) and society (ENGOs).

From the business perspective, for the industry to sign up to a covenant opens ways to avoid regulation, respond to public pressure and reduce costs or gain access to public funds to finance a process of transition (confer Australian Packaging Covenant 2010). By signing a covenant, the parties indicate their awareness of the problem and their willingness to work toward a solution, demonstrating a sense of responsibility for the environment (Glasbergen 1998).

As the distinction between the business oriented perspective and the policy oriented perspective are based on the first two generations of covenants, signed between government and industry, the role of ENGOs is not directly addressed as ENGOs do not become direct covenant partners. The ENGOs exert pressure through the public opinion, seeking on the one hand to force government to introduce tough regulations driving industry to the negotiating table and simultaneously making industry realise change is inevitable (cf. Bressers and de Bruijn 2005; Smit et al. 2008).

In the third generation of covenants the representatives of the societal concern (ENGOS) become signatory to the covenants. In for example the Netherlands the state actively seeks to change its role from a state 'taking care of issues' towards a state 'facilitating issues to be resolved'.^a A way of implementing this was by inviting parties concerned (ENGOS and industry) to resolve (environmental) issues amongst themselves. Entering into the covenant enables the ENGOS to influence measures and policy implementation and influence the path towards a solution. In case there is a stalemate between quarrelling partners, the covenant offers to both industry and ENGOS a way forward (cf. Glasbergen 1998). In this ENGOS seemingly face a rather fundamental choice to either enter into the covenant and reach a compromise on a solution and see that something is done, or remain outside the covenant with the risk that the environmental issue is not addressed at all.

Hence in order to understand covenants we will have to analyse the role and position of the parties involved and look at the scope and aims of the agreement reached. Examining the way in which the agreement is translated into a concrete plan of action and the way the covenant is intended to be monitored and evaluated will reveal whether the agreement is used as a tool for conflict resolution or as instrument to implement environmental policy. This will be reflected by the role of government in the process of the development of the covenant, together with the wider set of policy instruments deployed (financial support, policy measures), and the level of consensus reached between the signing partners.

Covenants in Dutch fisheries management

In a relative short period of time 3 covenants have been signed in the Netherlands between the fishing sector and government and, with the exception of one case, ENGOS. Following discussions between the Ministry responsible for fisheries^b and representatives of the fishing sector in the mid-2000s steps were taken to address issues of engine capacity management and the wider sustainability of North Sea cutter fisheries. More recent the stalemate between the fisheries sector and ENGOS on mussel seed fisheries in the Wadden Sea has been addressed.

Management of engine capacity

In 1975 the European Commission limited engine capacity for vessels operating in the 12-mile zone to a maximum of 300 Hp and a maximum 50 GRT (Gross Registered Tonnes). In the early 1980s the maximum of 50 GRT was traded for a maximum vessel length of 24 m. This resulted in the development of what later became known as the 'Eurocutter' fleet; a fleet of vessels operating in the coastal 12-mile zone with on average a length of 23.95 m (Hoefnagel 2007) but considerable larger than 50 GRT, in fact at times larger than 160 GRT. As this size of vessel could not be viably run on a 300 Hp engine the sector dodged the rules and installed engines with larger capacity. Breaking the rules at the time was quite easy as this period can be characterised as inadequate policing and enforcement by the Dutch state (van Ginkel 2005).

By the end of the 1980s the engine capacity of the North Sea fleet operating outside the 12-mile zone was limited to 2.000 Hp. As both fleets operate a beam trawl, the catch success of such active gear is directly related to the engine capacity. The engine capacity determines the amount of netting that can be successfully towed and the speed at which can be fished. Despite a seal plan (in which engines were sealed, or locked, at a

maximum capacity) and increased inspections during the 1990 and early 2000s, government did not manage to enforce the rules and increase compliance (Hoefnagel 2007).

Following the introduction of an individual transferable fisheries quota system in the Netherlands in the 1980s a system of co-management was introduced in the 1990s. Groups of fishermen became responsible for the management of the quota uptake throughout the year. In the 2000s Dutch government, enthusiastic about the success of the co-management system and willing to embark on an increase of co-operation in more policy dossiers, sought the devolution of more (monitoring and control) tasks to the co-management system, such as the management of the engine capacity. This offer was turned down by the fishing sector. As stated by Ed Nijpels, chairman of the commission looking into a recalibration, extension and broadening of the co-management system, taking more responsibility was perceived as possible by the fishing sector but only if implemented under equal circumstances for all (North sea) fishermen (Nijpels 2003). Apparently the management of engine capacity in the co-management groups was at that time not perceived by the fishing sector as providing a benefit. The management of quota in the co-management groups clearly provided benefits for individual fishermen such as increased flexibility because quota could be transferred; it provided certainty to use the quota at the time they deem economically most rewarding; and the likelihood that others dodge the rules and regulations was decreased (van Ginkel 2005).

Following the report of the Steering Committee Nijpels, the Minister had a series of what is commonly referred to as 'fire place discussions' with representatives of the fisheries sector during which the Minister conveyed his concern about the environmental sustainability of the beam trawl fisheries and the compliance of the sector. These discussions resulted in a joint statement in 2004. The Minister and the fisheries sector expressed their intention to establish a sustainable, viable and a social responsible cutter fisheries and their intent to embark on the required transition process (Anon. 2004). The fisheries sector would take responsibility to reduce the use of engines with a capacity larger than permitted in the fisheries license. It was felt that an approach in which the sector was involved in policing the capacity would result in increased compliance and thereby would be an effective addition to the public control (cf. De minister van Landbouw Natuur en Voedselkwaliteit 2008). This development fitted the overall political shift towards 'less rules and more own accountability/responsibility' of societal partners and citizens.

The '*Werkgroep Motorvermogen*' (the engine capacity working group installed under the Nijpels committee) designed a private arrangement consisting of a framework of private inspections and sanctions. This arrangement became operational mid-2005 and was a voluntary arrangement to which 89% of the fishers signed up (Hoefnagel and van Mil 2008). Fishers that signed up limited their engine to the capacity as permitted in their fishing license. To allow for a transition period those that signed the agreement were allowed to, at the start of the campaign, have an Eurocutter with an engine capacity that could be no larger than 400 Hp, after which it had to be reduced to a maximum of 300 Hp by 2009. For those that did not sign the agreement the engine capacity had to be brought in line with their fishing license immediately. Also the General Inspection Service of the Ministry (AID^c) performed random checks on 25% of those fishermen that had signed the arrangement; but a 100% inspection of those that did not sign.

The same co-management groups that manage the quota uptake also manage the engine capacity programme. If an infringement is found by the group members the culprit will be fined. If an infringement is detected by the AID an immediate reduction of the engine capacity is required. In addition a fine is imposed by the management group as set in the group's management rules.

According to a preliminary evaluation of the arrangement both the AID, the Boards of the co-management groups and fishers seem to be content with the implementation of the arrangement; no infringements have been detected and engine capacity is set at the levels as agreed. However, two aspects have become clear: as the arrangement next to self-control also aims at self-financing of the implementation, and since no infringements have been detected hence no fines collected, there is a financial deficit in the implementation of the arrangement. In addition, Board members of the fisheries groups experience a conflict of interest: on the one hand as enforcer of the public-private agreement they have to police their constituency, on the other hand they are promoter of the interest of the fishermen (De minister van Landbouw Natuur en Voedselkwaliteit 2008).

North sea covenant

In 2006 a Task Force Sustainable North Sea fisheries, established by the Ministry, consisting of representatives of the Ministry, the Dutch Fish Product Board, fisheries sector and market organisations, ENGOs, research institutions and fuelled by direct input from fishermen through a series of discussions, produced a report presenting the major challenges to reach sustainable fisheries on the North Sea (Task Force Duurzame Noordzeevervisserij 2006). There were two reasons for the establishment of this task force. On the one hand the rapid increase in the oil price seriously affected the viability of the fleet, which had been already confronted with diminishing catch opportunities for a prolonged period of time (Task Force Duurzame Noordzeevervisserij 2006). On the other hand, the societal acceptance of fisheries dwindled. Civil organisations, such as ENGOs, increasingly gained access to policy processes and were very critical of the sustainability of North Sea Beam Trawl fisheries. This is amplified by a development in the market where increasingly retailers, especially supermarkets, request guaranteed sustainable fish production. The report concludes that in order to achieve a viable and sustainable fisheries, state, market, societal organisations and science institutions should cooperate. It was explicitly suggested that a covenant should be signed between the sector and the most relevant ENGOs in order to regain the required societal acceptance of North Sea Fisheries.

During 2007 fisheries organisations and ENGOs started discussions on the development of this North Sea Covenant. Early 2008 the Ministry was asked to join the deliberations and by June 2008 the North Sea Covenant was signed between the Ministry, two ENGOs, the Dutch Fish Product Board and 5 Fisheries Producers' Organisations. The main agreements of the covenant were:

- Obtaining MSC certification for a number of fisheries between 2009–2012
- Improve communication on the sustainability of the sector
- Sustainable fisheries should become an integral part of the fisheries educational curriculum

- Embark on a joint process of establishing goals and measures for the establishment of Marine Protected Areas, operationalising NATURA 2000 and OSPAR agreements.
- The management of flat fish stocks should result at stocks at Maximum Sustainable Yield level by 2015; a multi annual management plan, reduction of discards and a joint and transparent system of data collection and scientific support to policy should be developed.

For each of these 5 elements of the covenant concrete tasks had been described for the state, industry and ENGOS. In order to facilitate the required transition process of the cutter fisheries and following one of the recommendations of the Task Force Sustainable North sea fisheries, government established a Fisheries Innovation Platform (FIP) which could finance initiatives towards a more sustainable fisheries.

Monitoring of the process was agreed to be a joint activity and became part of a regular meeting (*Groot Beheer Overleg*, a semi-annual meeting of the main players from state, market and society; by the end of 2008 a separate meeting for covenant partners was established). The signing parties agreed that each of them was responsible for the implementation of the covenant and had a task in both promoting this covenant publically and create support for the covenant in one's constituency.

Mussel covenant

In October 2008 the Minister signed a covenant with ENGOS and the mussel producers organisation to reach a transition in the mussel fisheries and restore nature in the Wadden Sea area. The signing of this covenant marked an end of a period commonly known as 'the war on the Wadden Sea': a prolonged legal battle in which licences granted to the mussel fishers were continuously challenged in court by the ENGO community. Twice a year fisherman from the Zeeland province in the South West of the Netherlands come to the Wadden Sea in the North to collect mussel seed which is then spread out on plots where the mussel seed grows to reach consumption size. Based on wild capture, in fact the mussel sector is the largest mariculture sector in the Netherlands.

The Wadden Sea is a protected area, regulated under the Key Planning Decision Wadden Sea (PKB), the establishment of the State Nature Reserve Wadden Sea (falling under the Nature Protection Act), the Fisheries Act, the Flora and Fauna Act and the Interprovincial Policy Plan for the Wadden Sea (EcoMare 2009), next to EU regulation of Bird and Habitat directive, Natura 2000 area and the Water Directive. Ninety per cent of the Wadden Sea has been designated as a State Monument. Fishery activities must fit in with the nature protection policy. That means that the effects of the fisheries on the environment must be taken into account: the benthic life, the marine mammals and the food supply for birds. Undesired effects must be managed by limitation of fishing activity. In 2005 and 2008, the Council of State decided, based on a judicial procedure initiated by a number of ENGOS, that the Ministry unrightfully issued licenses to the mussel seed fisheries. The seed fisheries on wild banks contradicts the European Bird and Habitat Directive. The spring fishing in 2008 was consequently cancelled and the autumn fishing was being threatened.

The judicial procedures frustrated further development and threatened the viability of the mussel sector. In order to reach a way out of these doldrums a

commission was established by the Ministry which prepared the draft covenant, which was signed in October 2008 by the Minister, the Mussel Producers Organisation and four ENGOS. The ENGOS promised not to start any judicial procedure provided the mussel sector would do everything in its power to convert seed fishing and mussel cultivation into an environmental-friendly industry by 2020. The covenant states that the Wadden Sea is a nature conservation area in which human activities can be tolerated as long as they are not conflicting with the main goal of nature preservation. Also the covenant provides a period in which the mussel fisheries is allowed to embark on a transition process towards a more sustainable mussel seed harvesting technique.

>Early 2009 the covenant was translated into a plan of action defining concrete activities. Core of the plan is that by 2020 the traditional mussel seed fishery is banned from the Wadden Sea and is being replaced by a method not interfering with the bottom. In fact in 2009 already 20% of the Wadden Sea was closed for mussel seed fisheries and annually this closure will be extended to a larger part of the Wadden Sea (Waddenzee 2009). The covenant at the same time stipulates that the transition process should allow for a viable operation of the sector. Noting the past volatile history of the conflict between fishers and conservationists it is not surprising that this covenant addresses explicitly the fact that implementation of the covenant is the task of all signing parties and that in case there is disagreement parties will not start a judicial procedure. Moreover, it is stated that the covenant cannot be legally enforced.

Following the signing of the covenant a work plan was developed by early 2009 which provided concrete and detailed actions. Again specific roles and tasks were defined for government, the sector and the ENGOS. Main target is the progressive closing off of the Wadden Sea for bottom disturbing gear. This agreement between signing parties does have an effect on fisheries that are not part of this covenant such as the shrimp fisheries and static gear fisheries. The plan of action states that these actors should be included in the implementation of the plan. However, they are not part of the covenant signing parties.

Monitoring of implementation is again a task for the signing parties. A detailed evaluation programme has been incorporated in the work plan, based on a monitoring and research plan. The covenant partners together decide upon research institutes that will fulfil the scientific role in the monitoring of the implementation and the effects it has on the ecosystem.

The mussel covenant was severely put under pressure May 2009 as one of the ENGOS that was not signatory to the covenant (the '*Faunabescherming*' (fauna protection) foundation) challenged the permit for mussel fisheries on the Wadden Sea in court. The Council of State ruled that a further limitation of the mussel fisheries was in order and reduced the permit as given by the Ministry for mussel fisheries on the Wadden Sea with an additional 25%. The Dutch House of Representatives, in debating the outcome of this procedure, queried the value of the instrument of covenants as apparently in judicial procedures any individual or organisation can claim to be stakeholder and challenge the agreement reached in the covenant, often after a lengthy process of seeking compromise (Tweede Kamer der Staten Generaal 2009).

Analysing the character of Dutch fisheries covenants

Over the last decade the Ministry developed the motto of '*van zorgen voor naar zorgen dat*' (from taking care of towards enabling) which implies a shift in the position and role

of government. Government seeks private initiative to reach policy goals, where before governmental rule making and enforcement were the preferred tools. In all the three Dutch fisheries management cases described above the government has opted for a voluntary agreement with industry to reach policy objectives.

In order to understand the different covenants we will look at the scope and aims of the agreement reached, the way in which the agreement is translated into a concrete plan of action and the way the covenant is intended to be monitored and evaluated. Analysing the role of government, industry and ENGOs in the process of the development of the covenant, together with the wider set of policy instruments deployed (financial support, policy measures), will reveal the scope and intend for the use of a covenant.

In the case of the engine capacity arrangement main government concern was to increase compliance with fisheries regulation. The existing rules and enforcement were not sufficient to bring about the required industry behaviour. In fact the rules were easy to dodge, rules were not effectively enforced and punishment was not felt to be restrictive (van Ginkel 2005). Fishers indicate that if punishment for excessive engine capacity would have been much stiffer (in the range of tying up vessels for a number of months and high fines) the rules would have been much more complied to (Hoefnagel 2007). The incentive to increase engine capacity is eminent in an active towed gear fisheries such as the beam trawl, in which engine capacity to a large extent determines catch success.

Government tried for some time to get the industry to play a role in enforcement of these rules. Although at first turned down by the fishing sector, they later came to the negotiation table driven by economic concerns and societal pressure. Falling economic returns as a result of the prevailing high oil price which, as a side effect, induced a rationalisation of the use of fuel and hence engine capacity, was one of the drivers. In addition there was increasing pressure from society, ENGOs and the Minister to strive for a more sustainable production. As a result of the covenant compliance has increased based on a voluntary agreement but with the stick behind the door of inspections by the government control agency.

The engine capacity state-industry agreement had a very clear path of implementation and specific rules for those individuals not signing up to the covenant. Implementation was monitored by the state and by way of external evaluation at three moments in time the impact of the regulation was appraised. The necessity for the sector to comply is felt; in the light of the wider sustainability discourse the sector perceives the need to change and the urgency to obtain a licence to produce. The agreement plays a role in opening the stalemate in which fishers point at each other for non-compliance; individuals were only inclined to change conduct when free rider behaviour was no longer tolerated.

Whereas the engine capacity agreement is a bilateral state-industry agreement, the North Sea Covenant is a tripartite arrangement between state, industry and ENGOs. It aimed at obtaining a viable and sustainable fisheries sector within the boundaries of a healthy ecosystem, bringing the environmental concern and the economic concern together to obtain an implementation plan. From the industry's perspective the sector is confronted with dwindling returns and a public opinion and market that demand sustainable fish production. In addition, the traditional neo-corporatist arena in which

industry and government could negotiate policies is increasingly being influenced and invaded by public concern as expressed by ENGOs (de Vos and van Tatenhove 2011). By entering into the agreement the sector gained time, political support and resources (through the FIP and European subsidies of the European Fisheries Fund, EFF) to embark on a transition process. From a societal perspective the covenant brought about a process of necessary change in the fishing industry. In addition the covenant provided a stage on which environmental concerns and actions towards more sustainable production could be directly discussed with the fishing sector. From the point of view of the state the covenant created leeway for the industry to become sustainable in an environmental and economic sense yet simultaneously creates a sense of urgency to the industry to truly embark on this transition towards more sustainable production. The North Sea covenant and its consecutive work plan consisted of 5 themes on which agreement could be reached. It mainly consisted of the intention between the signatories to address an array of issues that need further operationalisation.

Concerning the mussel covenant, from the perspective of government, the required transition of the mussel industry towards more sustainable production was hampered by mistrust and judicial processes between industry and ENGOs. In order to bring about a meaningful transition the stalemate caused by the “War on the Wadden Sea” needed to end. Government took a leading role in orchestrating the coming about of this covenant. Industry and ENGOs were persuaded to compromise in order to change the stalemate into a process of change in which both parties could seek to obtain their goals. The mussel covenant demonstrated these differences of opinion between the signing parties by having not one single objective but two main goals: the transition of the mussel fishing techniques to become more sustainable and the development of a Wadden Sea Nature Conservation plan. This covenant, in contrast to the other two arrangements, detailed quite an array of actions to be undertaken by government.

For the industry the mussel covenant provided a platform to continue operation, a licence to produce, while simultaneously embarking on a transition process. For the ENGOs giving up their resistance provided them with a role in the process of transition of the sector and simultaneously created the development of a nature conservation programme, which stretches beyond fishing activities. For government it provided a basis for meaningful change, providing a way to obtain time for the sector to adjust the production process to be able to continue operating in a nature reserve and ending a routine were all the Minister’s decisions were challenged in court. The mussel covenant is the most clear example of use of a covenant as instrument for conflict regulation. It is also the covenant which depends to a large extent on outside independent (scientific) monitoring and evaluation.

So far the engine capacity covenant is perceived to be successful with no infringements and vessels having adjusted engine capacity. The North Sea covenant has facilitated a process of transition and an array of initiatives have emerged under the FIP such as the development of new fishing technology (pulse trawl, reduction of fuel consumption), improved marketing initiatives and sharing of knowledge among fishers have been launched to support this process. The mussel covenant is put under pressure from parties not being signatory by contesting the agreement in court.

From a business perspective the three covenants differ in scope, incentives and rational to sign up to this voluntary agreement. The engine capacity agreement provided

the fisheries sector with a transition period in which it could adapt operating practices to already existing rules. The stick behind the door of government control and sanctioning, together with the carrot of industry self-control and a transition period for adjusting to the rules, provided an incentive for change. The North Sea covenant provided incentives for change towards more sustainable fishery practices against the stick behind the door of a required licence to produce based on public opinion on the use of marine resources and especially supermarkets, requesting guaranteed sustainable fish production. The mussel covenant provided the industry a way out of a deadlock on obtaining a fishing licence and hence allowed for continuation of business.

From a business perspective the main conclusion is that for the industry the covenants provide an opportunity to adjust to a changing societal perception of sustainable use of the marine environment. The licence to produce, formerly literally provided by the state, was brought to question by a growing societal environmental concern. In order to maintain or regain a licence to produce, the covenants provided a tool for the sector to embark on more sustainable ways of production. At the same time it provided the industry with a say in the scope of the transition process.

From a public administration perspective, the cases show that government can have different roles and positions in the (process of arriving at an agreement of a) covenant. The engine capacity covenant is close to what Glasbergen (1998) refers to as a first phase single issue agreement for a specific issue between state and industry. The state provided both stick (control and punishment) and carrot (transition period). In the North Sea covenant case government provided a carrot (funds and the FIP) and facilitated the process of industry and society conjointly developing a programme for more sustainable use of marine resources. In the mussel case the carrot provided by the state (a conservation plan for the Wadden Sea and a transition period for the mussel sector to reach sustainable operation) provided the leeway for industry and ENGOS to reach agreement on further use of the area for fisheries; hence government much more in the role of facilitator seeking to reduce conflict.

From a public administration perspective two factors can be noted that influenced the state to seek to deploy the covenant as policy instrument. First, societal concern regarding sustainable use of marine resources increased over time, threatening the licence to produce of the fishing industry. Secondly, the state failed to implement at least some of its marine policy by using the more traditional state centred policy instruments. This resulted in what several authors describe as the shift in fisheries governance with the inclusion of a broader range of stakeholders and interactions (Kooiman, et al. 2005; Mahon, et al. 2010) in which various actors gain influence on each other and on the policy to be formulated. We see a repositioning of the state in relation to the actors from industry and society. The covenants are a manifestation of government negotiating fisheries policy in order to obtain a more sustainable use of marine resources. Of course, as mentioned above, the environmental angle of policy and the strive for a more sustainable production cannot be isolated from other factors such as the economic crisis in fisheries and the general criticism on the failure of government worldwide to properly manage fisheries.

The degree of self-management differs between the three covenants. In the North Sea covenant and mussel covenant quite some opportunity can be found for the covenant partners to (re)define policy whereas under the engine capacity covenant policy is not renegotiated at all; in the end the industry will comply with prior existing regulation.

Discussion

In all of the 3 cases of Dutch fisheries covenants a form of joint problem solving can be found. In fact a large part of these covenants are about creating a process of change in which the fishing industry together with ENGOs define a transition towards a more sustainable production. Instead of opting for state regulations to bring about the transition, government opted for the use of a covenant, bringing together state, industry and societal concern to define and guide the transition process. In that sense a covenant is clearly a tool that reflects a repositioning of government: in dialogue with stakeholders, with at times different stakes and concerns, agreement is reached on (policy) goals and ways to achieve these. The covenant is an instrument with which parties from industry and society can directly influence government policy.

The covenant takes the form of a social contract in which the signing parties agree upon the implementation of a work plan. Government is ultimately responsible for enforcement of implementation, but negotiations on goals and on implementation is transferred to the other actors and all signing parties can hold each other accountable for implementation.

The three Dutch cases show that the instrument can be utilised by the state in three different ways. In the agreement on the management of engine capacity the government is using the instrument as tool for increased compliance to and enforcement of legislation. In the mussel covenant government uses the tool to pacify the nature conservation movement, which was obstructing policy implementation by taking all Ministerial decisions to court; the covenant serves as a conflict resolving measure. In the North Sea covenant government uses the input of civil society to persuade the fishing sector to embark on a more environmental sustainable mode of production. In fact it is public opinion that forces the fishing sector to the table; government positions itself as facilitator to embark on a transition action plan.

Government can chose to be initiator of a covenant (engine capacity management) or can line up with public debate and facilitate the coming about of a social contract. Especially in those cases where state, market and civil society team up in a covenant the transparency, openness and accountability of the policy cycle is greatly enhanced. Hence, following Bressers and de Bruijn (2005), as a result the legitimacy of a covenant, as opposed to traditional top-down management, is much larger.

The case study of the mussel covenant is illustrative of the scenario where the (increasing) regulation of resource use resulted in ever-increasing high transaction costs and eventually almost caused irreparable damage to the relation between the key actors involved. So, whereas Bressers and de Bruijn (2005) argue that covenants do not seem to be an efficient instrument if all partners know the precise measures to be taken, the instrument can still be deployed to increase acceptance of the measures. The implementation of legislation, especially in democratic settings with a high degree of consultation and mechanisms to challenge decisions, can bear such high transaction cost that in such situations covenants may be the more efficient way forward.

The use of covenants also can be related to the complexity of the issue the state seeks to address and the limits to the governability of marine resource use. Limits to governability can be found in both the governing system and the system to be governed (Chuenpagdee, et al. 2005; Kooiman and Chuenpagdee 2005; Jentoft 2007). Kooiman et al. (2005) argue that governability is shaped by diversity, complexity and dynamics of

the (marine) system. To this can be added the vulnerability of the system (Jentoft 2007), the resilience of the system, the dependency of a community on fishing and fishing related activities and the flexibility of the community to deal with outside induced changes (Lindkvist 2000; Phillipson 2000; Symes 2000; Hatchard, et al. 2006; Hatchard, et al. 2007). Top-down management is perceived not to be adequate or capable anymore to govern fisheries effectively with a large complexity of the marine socio-ecological system – as there is no one single root cause problem to address but a complex system of causes and effects perhaps even stemming from outside the specific system. But it also relates to the perception that the existing knowledge of the functioning of ecosystem and social system may be less than sufficient, that proper management tools may be lacking, and some realms of the system-to-be-governed may be out of its reach if, for instance, the users resist interference in their activities (Jentoft, et al. 2007). This inability to govern would be a major cause for the failure of government to address the complex problems and would urge for opening up to more participative, inclusive and deliberative forms of management.

The emergence of these more participative, inclusive and deliberative forms of management such as covenants as policy instrument may seem a logical development in Dutch fisheries as the fisheries was already managed under a form of co-management. The Netherlands are widely renowned for their '*polder model*'; the corporatist arrangements that lie at the heart of the capitalist economies of the small Western European countries, in which a strive for negotiated consensus between government and industry is basis for conflict resolution (Tjiong 2005). In most of European fisheries management a form of neo-corporatism exists: a well-defined exchange relation between state, market and civil society actors in which policies are made and implemented jointly, based on a commonly agreed substantive discourse, in which the participating organisations are granted privileged influence on public policy-making in exchange for disciplining their constituency (the fishermen) and restraining their demands (Frouws and van Tatenhove 1993; van Hoof, et al. 2005). Hence governments across Europe already traditionally have an institutional setting in which agreements with the fisheries sector can be reached and hence covenants would fit this setting.

With the 2002 reform of the Common Fisheries Policy (Commission of the European Communities 2001) clearly the European Commission has embarked on a process of redefining the position of Member States, industry and stakeholders in the process of policy formulation. The establishment of Regional Advisory Councils (RACs), following the 2002 CFP reform, redefined the constellation of stakeholders involved in the CFP policy process, allowing industry and societal organisations to provide advice. In this vain of considering delegation of policies and overall an increase in participation in the policy process, an instrument such as joint policy development by way of covenants could play a role.

The strive of the current reform of the CFP is, among others, to reach

- a more simple and less costly policy with implementation closer to the people;
- a decision-making system that encourages a more long term focus;
- a framework that provides sufficient responsibility to the industry;
- a reduction of the lack of political will to ensure compliance and poor compliance by the industry (Commission of the European Communities 2008; Commission of the European Communities 2009).

From the Dutch experience with covenants we can draw the conclusion that covenants are a proper vehicle to increase the responsibility of the industry. With reduced infringements the implementation of policy becomes less costly and is brought much closer to the people. By including ENGOs in the agreement the political will to set more long term objectives and to ensure compliance can be increased. Covenants can provide a tool to bring together state, industry and societal concern in a constructive way, developing an agreement that fits with the local, regional circumstances, yet operating within a general framework of fisheries policy.

Following the analysis of de Vos and colleagues (de Vos and Mol 2010; de Vos and van Tatenhove 2011) a covenant could enhance the building of trust relations between the government, industry and ENGO community. Hence, following Jentoft (2007) a covenant is not so much about the exercise of authority as it is about political brokerage. Covenants can effectively serve as an alternative for state top-down fisheries management. By allowing the fisheries sector to negotiate change with both government and ENGOs the covenants provide a useful alternative institutional arrangement that in fisheries management can help achieving an economically, ecologically and socially sustainable fisheries.

Endnotes

^a A government slogan in the Netherlands past has been : *van zorgen voor naar zorgen dat* which freely translated states: moving from a state resolving problems towards a state that ensures that problems are solved, but not necessarily by government itself.

^b Currently the Ministry for Economic Affairs, Agriculture and Innovation, before known as the Ministry for Agriculture, Nature and Fisheries; in the remainder of this article we will refer to it as 'the Ministry'.

^c Today the AID is renamed to nVWA, the new Food and Produce Authority

Competing interest

The author declares that he has no competing interests.

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